L35 ANSWER 24 OF 42 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1997:44791 HCAPLUS
DOCUMENT NUMBER: 126:56783
TITLE: Assay reagents containing indicator group-leaving group conjugate and their use in cytoenzymological diagnosis of diseases
INVENTOR(S): Lucas, Frank J.; Jaffe, Gerald E.; Bott, Steven E.; Carter, James H.
PATENT ASSIGNEE(S): Coulter International Corp., USA
SOURCE: PCT Int. Appl., 238 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 5
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9636729	A1	19961121	WO 1996-US6860	19960514
W: CA, JP				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 5698411	A	19971216	US 1995-444051	19950518
US 5733719	A	19980331	US 1995-445217	19950518
US 5776720	A	19980707	US 1995-443776	19950518
US 5871946	A	19990216	US 1995-444056	19950518
EP 832279	A1	19980401	EP 1996-915790	19960514
R: CH, DE, FR, GB, LI, NL				
JP 11505702	T2	19990525	JP 1996-534975	19960514
US 5849513	A	19981215	US 1997-904400	19970731

PRIORITY APPLN. INFO.:

US 1995-443776	A	19950518	
US 1995-444051	A	19950518	
US 1995-444056	A	19950518	
US 1995-445217	A	19950518	
WO 1996-US6860	W	19960514	

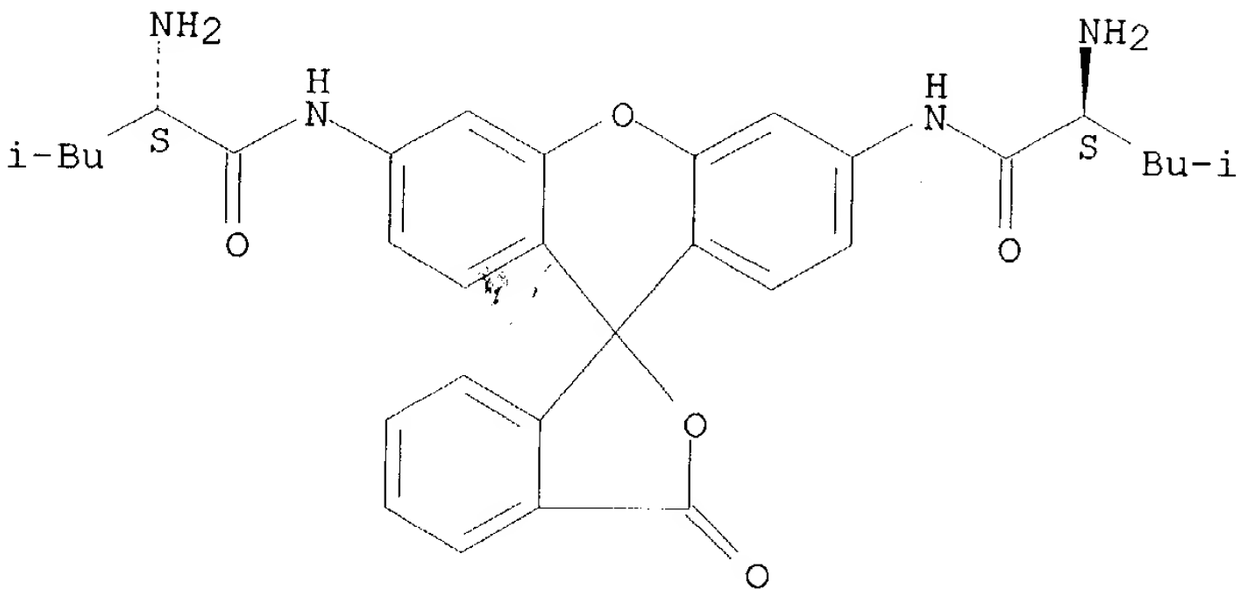
AB An assay compd. or a salt thereof for assaying the activity of an enzyme inside a metabolically active whole cell is disclosed. The assay compd. includes a leaving group and an indicator group. The leaving group is selected from the group comprising amino acids, peptides, saccharides, sulfates, phosphates, esters, phosphate esters, nucleotides,

polynucleotides, nucleic acids, pyrimidines, purines, nucleosides, lipids and mixts. thereof. The indicator group is selected from compds. which have a first state when joined to the leaving group, and a second state when the leaving group is cleaved from the indicator group by the enzyme. Preferably, the indicator compds. are rhodamine 110, rhodol, and fluorescein and analogs of these compds. The assay reagent may include addnl. compds. such as buffers, enzyme cofactors, enzyme inhibitors and enzyme modulators to improve specificity. A method of synthesizing the compd. as well as methods of using these compds. to measure enzyme activity are also disclosed. The assay compds. may be used to det. enzyme activities in such cells as lymphocytes and to diagnose diseases such as cancer and sepsis. The results of the assay may be analyzed by computer, e.g. a neural net with back propagation to check the results or an expert system with look-up tables for classifying the results. Using rhodamine 110-amino acid or -dipeptide derivs., peptidases in leukocytes of normal and leukemia patients were used to train a neural network. The neural network was then used to diagnose presence of leukemia in test patients.

IT **169045-41-4 185248-74-2**
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(assay reagents contg. indicator group-leaving group conjugate and their use in cytoenzymol. diagnosis of diseases)

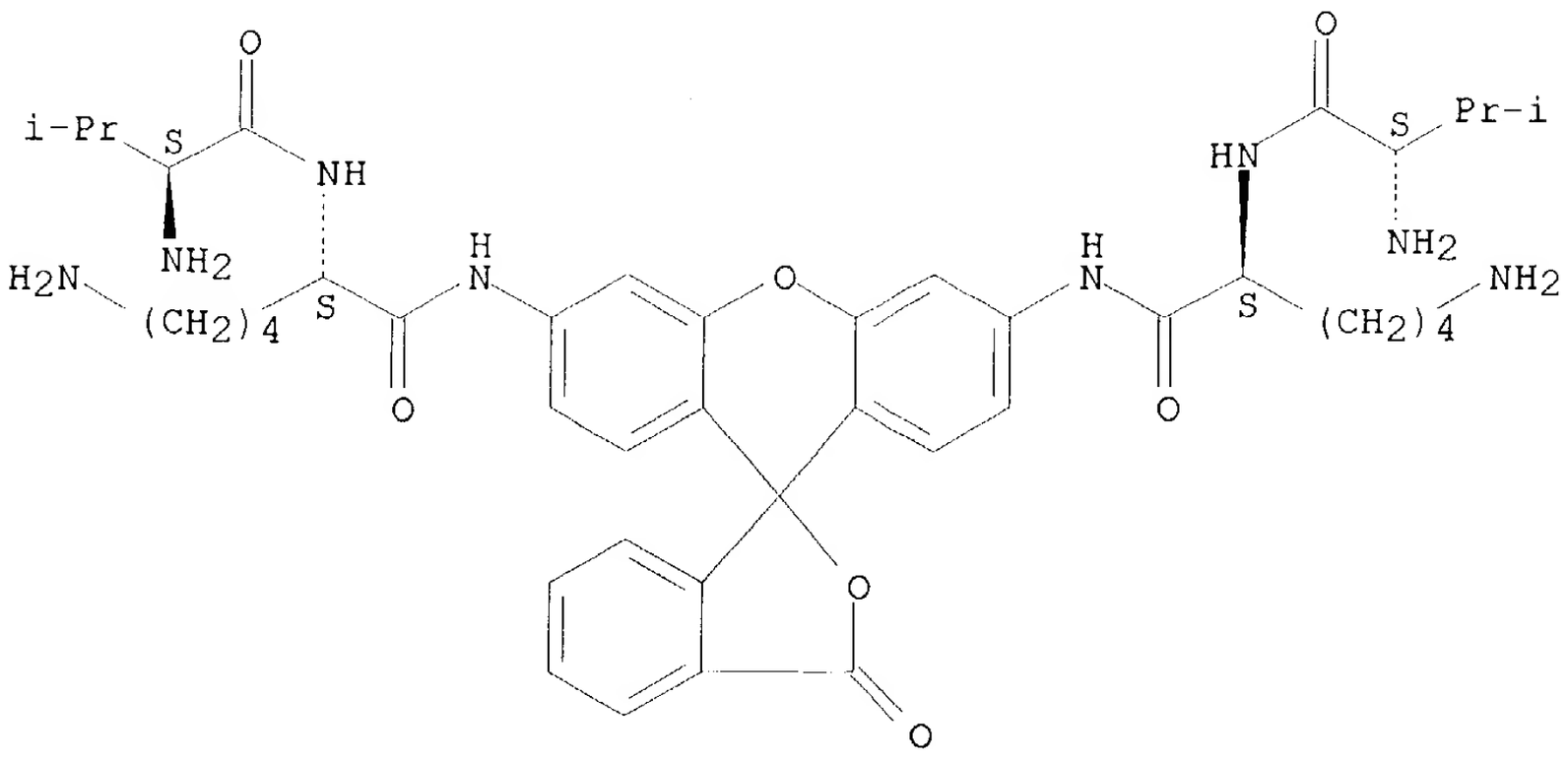
RN 169045-41-4 HCAPLUS
CN Pentanamide, N,N'-(3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthene]-3',6'-diyl)bis[2-amino-4-methyl-, (2S,2'S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 185248-74-2 HCAPLUS
CN L-Lysinamide, 2,2'-(3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthene]-3',6'-diyl)bis[L-valyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L35 ANSWER 25 OF 42 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1997:13433 HCAPLUS
DOCUMENT NUMBER: 126:58548
TITLE: Cytometric detection of mycobacterial surface **antigens**: exposure of mannosyl epitopes and of the arabinan segment of arabinomannans
AUTHOR(S): Ozanne, Valerie; Ortalo-Magne, Annick; Vercellone, Alain; Fournie, Jean-Jacques; Daffe, Mamadou
CORPORATE SOURCE: Institut Pharmacologie Biologie Structurale, Centre National Recherche Scientifique and Universite Paul Sabatier, Toulouse, F-31062, Fr.
SOURCE: Journal of Bacteriology (1996), 178(24), 7254-7259
CODEN: JOBAAY; ISSN: 0021-9193
PUBLISHER: American Society for Microbiology
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The phys. arrangement of cell envelope components leads to the exposure of selected structural motifs which in turn may influence host-parasite interactions. To gain insight into the exposed epitopes, the present study describes a flow cytometric method designed to probe defined mols. on dispersed mycobacteria. The hydrophobic fluorophore N-hexadecanoyl aminofluorescein inserted in the mycobacterial cell envelope permitted focusing of fluorescence-activated cell sorter anal. on cells that were further labeled with defined monoclonal antibodies and fluorochrome-coupled streptavidin. The use of antibodies directed against the lipooligosaccharide of Mycobacterium tuberculosis demonstrated the specific detection of the **antigen** on the cell surface of a Canetti-like strain of M. tuberculosis, and not on those of mycobacterial strains that were devoid of the glycolipid. Thus, the method was applied to investigate the relative amts. of surface-exposed mannosylated compds. and D-arabinan-contg. substances of different strains of the tubercle bacillus and a strain of the rapidly growing nonpathogenic species Mycobacterium smegmatis. Both M. tuberculosis and M. smegmatis are endowed with mannosyl and arabinan epitopes on their surfaces, although there are many differences in terms of exposed mannosyl epitopes between the various strains of the tubercle bacillus examd. These differences are correlated with the amts. of terminal mannosyl residues that cap the